Clement Wan

(416) 300-9530

clementwan1998@gmail.com
github.com/ClementWan1998
linkedin.com/in/clementwan1998/

About Me

Incoming computer science PhD student training to solve research problems in mathematical logic and its applications. In particular, I am interested in universal algebra and programming language theory.

Education

PhD in Computing Science — Starting Sept 2023
studying Theory of Computing and Language Theory at Simon Fraser University

Master of Mathematics — 2021-2022
studying Pure Mathematics at the University of Waterloo — CGPA: 88.67/100

BASc in Engineering Science — 2015-2021
studying Math, Stats and Finance at the University of Toronto — CGPA: 3.54/4.0

Languages

Python, PostgreSQL, MATLAB, Java, C, C++, Verilog, ARM Assembly

Work Experience

Graduate Teaching Assistant — Sept 2021 - Aug 2022
University of Waterloo

- As grading team leader, distributed grading work, monitored for common student errors, and liaised with students, teaching team, and course coordinator
- Evaluated student assessments and provided feedback to students in first, second, and third year undergraduate level mathematics courses

Market Data Analyst — May 2018 - Apr 2019
Independent Electricity System Operator (IESO)

- Monitored Ontario's wholesale electricity market by analyzing price, bid, and offer data using Pandas, PostgreSQL, and MATLAB in support of market oversight
- Provided data analysis for two major market investigations resulting in over $20 million in compliance payments

Research Assistant (Volunteer) — May 2017 - August 2017
University of Toronto (Kundur Research Group)

- Independent study and presentation of machine learning concepts to research group
- Performed a literature review of recent developments in machine learning techniques

Research Assistant — May 2016 - August 2016
University of Toronto (Hatton Lab)

- Fabricated microfluidic devices for bio-inspired micro-structured surface laboratory research
- Programmed a microcontroller for a device with switchable surface wetting properties

Projects

Data Pipeline Monitoring — Sept 2019 - Dec 2019
University of Toronto

- Developed data pipeline monitoring tools in collaboration with Sanau, a machine learning startup
- Showcased the application of the tool on a sample dataset visualizing notable statistical attributes

Autonomous Robot Team — Sept 2016 - Apr 2017
University of Toronto

- Designed and built an electromechanical autonomous bottle-sorting robot with electronic interface
- Planned and implemented robot microcontroller processes and systems control

Aerogrow Team — Nov 2015 - May 2016
Institute for Leadership Education in Engineering

- Created a prototype and business plan for residential aeroponic units.
- Won 2nd Place in ILead's social innovation challenge.